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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/716,172

11/18/2003

Diana Maria Cantu

1033-T00535

3909

34431

7590

06/18/2007

HANLEY, FLIGHT & ZIMMERMAN, LLC

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SUITE 2100

CHICAGO, IL 60606

EXAMINER

LE, MIRANDA

ART UNIT

PAPER NUMBER

2167

MAIL DATE

DELIVERY MODE

06/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/716,172	Applicant(s) DIANA CANTU	
	Examiner Miranda Le	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26, 29-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/29/07 has been entered.

2. This communication is responsive to Amendment, filed 03/29/07.

Claims 1-26, 29-30 are pending in this application. In the Amendment, claims 27-28 have been cancelled, claims 29-30 have been added. This action is made non-Final.

3. The rejection of claims 1-26 under 35 U.S.C. §101 has been withdrawn in view of the amendment.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2167

5. Claims 1-4, 6, 8, 9, 14-17, 19, 21, 29, 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Nelson et al. (US Patent No. 6,601,065).

Nelson anticipated independent claims 1, 14 by the following:

As per claim 1, Nelson teaches a method for organizing related communications in databases (*i.e.* FIG. 1 shows three databases 31-33, the present invention is compatible with a system which includes only one database, or a system which includes a large number of databases. Further, even though FIG. 1 shows two databases that are specific to the LDAP and SQL protocols, the databases in the system could each conform to some other respective protocol, col. 2, lines 47-60), the method comprising:

receiving at least one XML-based message (*i.e.* in a packets or message units that contain information in a format which conforms to XML standards, col. 3, lines 12-22) from at least one communication device (*i.e.* transmitting from a client through the network a message ... which contain a request directed to a repository, the request being in a first format conforming to a public network communication protocol, col. 1, lines 39-62; See TABLE 1, col. 11);

comparing (*i.e.* XML parser and a request analyzer, col. 3, lines 12-22) one or more XML tags (*i.e.* a tag identifying the specific type of request that is being made, col. 5, lines 4-10) within the at least one XML-based message to one or more references (*i.e.* <GetDirectory> <Server>ldap.cisco.com</Server> <LastName>Nel*</LastName> </GetDirectory>; See TABLE 1, col. 11), wherein each reference is associated with one or more previous messages (*i.e.* user information, col. 10, lines 10-19; telephone directory information, such as a list of names and associated telephone numbers ... user information includes information regarding which

users are authorized to access the directory information stored within the databases 31-33, col. 4, lines 13-26; See TABLE 1, col. 11);

selecting a reference (<Server>ldap.cisco.com</Server>; See TABLE 1, col. 11) that most closely matches one or more of the XML tags (i.e. user information, col. 10, lines 10-19; telephone directory information, such as a list of names and associated telephone numbers ... user information includes information regarding which users are authorized to access the directory information stored within the databases 31-33, col. 4, lines 13-26; See TABLE 1, col. 11);

converting the received message into a converted message having a format associated with at least one database associated with the matching reference (i.e. converting the request from the first format to a second format compatible with a protocol of the repository, col. 1, lines 39-62); and

causing the converted message to be stored in a first database when the reference is associated with the first database or a second database when the reference is associated with the second database (i.e. a new telephone number for that person, which is to be stored in the user information 61 in place of a prior telephone number, col. 10, lines 10-18).

As per claim 14, Nelson teaches a system for organizing related communications in database, the system comprising:

a mediation web server operable (i.e. the telephone 21 can interact through the network 12 and the database layer 29 with one or more of the databases 31-33, col. 9, lines 25-35) to:

receive at least one XML-based message (*i.e. in a packets or message units that contain information in a format which conforms to XML standards, col. 3, lines 12-22*) from at least one communication device (*i.e. transmitting from a client through the network a message ... which contain a request directed to a repository, the request being in a first format conforming to a public network communication protocol, col. 1, lines 39-62; See TABLE 1, col. 11*);

compare (*i.e. XML parser and a request analyzer, col. 3, lines 12-22*) one or more XML tags (*i.e. a tag identifying the specific type of request that is being made, col. 5, lines 4-10*) within the at least one XML-based message to one or more references (*i.e. <GetDirectory> <Server>ldap.cisco.com</Server> <LastName>Nel*</LastName> </GetDirectory>; See TABLE 1, col. 11*), wherein each reference is associated with one or more previous messages (*i.e. user information, col. 10, lines 10-19; telephone directory information, such as a list of names and associated telephone numbers ... user information includes information regarding which users are authorized to access the directory information stored within the databases 31-33, col. 4, lines 13-26; See TABLE 1, col. 11*);

select a reference (*<Server>ldap.cisco.com</Server>; See TABLE 1, col. 11*) that most closely matches one or more of the XML tags (*i.e. user information, col. 10, lines 10-19; telephone directory information, such as a list of names and associated telephone numbers ... user information includes information regarding which users are authorized to access the directory information stored within the databases 31-33, col. 4, lines 13-26; See TABLE 1, col. 11*);

convert the received message into a converted message having a format associated with at least one database associated with the matching reference (*i.e. converting the request from the*

first format to a second format compatible with a protocol of the repository, col. 1, lines 39-62);
and

cause the converted message to be stored in a first database when the reference is associated with the first database or a second database when the reference is associated with the second database (*i.e. a new telephone number for that person, which is to be stored in the user information 61 in place of a prior telephone number, col. 10, lines 10-18*).

As to claims 2, 15, Nelson teaches the received message and a previous message corresponding to the selected reference are substantially related to one another (*i.e. user information, col. 10, lines 10-19; telephone directory information, such as a list of names and associated telephone numbers ... user information includes information regarding which users are authorized to access the directory information stored within the databases 31-33, col. 4, lines 13-26; See TABLE 1, col. 11*).

As to claims 3, 16, Nelson teaches enabling a telecommunications service (*i.e. the telephone 21 can interact through the network 12 and the database layer 29 with one or more of the databases 31-33, col. 9, lines 25-35*) that organizes related communications in one or database (*i.e. FIG. 1 shows three databases 31-33, the present invention is compatible with a system which includes only one database, or a system which includes a large number of databases. Further, even though FIG. 1 shows two databases that are specific to the LDAP and SQL protocols, the databases in the system could each conform to some other respective protocol, col. 2, lines 47-60*).

As to claims 4, 17, Nelson teaches converting a next message into a same format as the converted message when the next message has one or more XML tags that match the XML tags of a previous message (*i.e. the person can send one or more messages relating to databases which do not need authorization has already been established, col. 7, lines 41-51*); and

forwarding the next message to the database associated with the converted message (*i.e. the person can send one or more messages relating to databases which do not need authorization has already been established, col. 7, lines 41-51*).

As to claims 6, 19, Nelson teaches selecting an initial database when no reference most closely matches one or more of the XML tags of the received message (*i.e. an additional database using some new protocol could be added to the system 10, and the computer 14 and telephone 21 would continue to communicate with the XML interface 44 in the same basic manner used for all other databases, without any need to be provided with additional intelligence about the particular communication protocol associated with the newly-added database, col. 3, line 33 to col. 4, line 2*);

converting the received message into a format corresponding to the selected, initial database (*i.e. an additional database using some new protocol could be added to the system 10, and the computer 14 and telephone 21 would continue to communicate with the XML interface 44 in the same basic manner used for all other databases, without any need to be provided with additional intelligence about the particular communication protocol associated with the newly-added database, col. 3, line 33 to col. 4, line 2*); and

forwarding the converted message to the selected, initial database (*i.e. an additional database using some new protocol could be added to the system 10, and the computer 14 and telephone 21 would continue to communicate with the XML interface 44 in the same basic manner used for all other databases, without any need to be provided with additional intelligence about the particular communication protocol associated with the newly-added database, col. 3, line 33 to col. 4, line 2*).

As per claim 8, Nelson teaches the different communication devices are selected from the group consisting of a voicemail server, a facsimile server, an email server, and a web server (*i.e. The system 10 also includes a telephone 21 which is coupled to the network 12. The present invention contemplates that a number of such telephones will be coupled to the network 12 but, for clarity, only one is shown in FIG. 1. The telephone 21 is a type of telephone commonly referred to as an Internet protocol (IP) telephone. IP telephones carry out telephony functions by transmitting digital message units through packet switched networks, such as the network 12 of FIG. 1, col. 2, lines 30-40*).

As to claims 9, 21, Nelson teaches the database format is selected from the group consisting of Oracle, Sybase, MySQL, MsQL, and DB2 (*i.e. FIG. 1 shows three databases 31-33, the present invention is compatible with a system which includes only one database, or a system which includes a large number of databases. Further, even though FIG. 1 shows two databases that are specific to the LDAP and SQL protocols, the databases in the system could each conform to some other respective protocol, col. 2, lines 47-65*).

As per claim 29, Nelson teaches comparing (*i.e. XML parser and a request analyzer, col. 3, lines 12-22*) the one or more XML tags within the at least one XML-based message to the one or more references (*i.e. <GetDirectory> <Server>ldap.cisco.com</Server> <LastName>Nel*</LastName> </GetDirectory>; See TABLE 1, col. 11*) comprises:

extracting a first portion of data stored in the at least one XML-based message (*i.e. The module 38 will take the information extracted from the XML message in TABLE 6, convert it into an SQL query, and then send the SQL query to the database 32. The SQL query transmitted by the module 38 to the database 32 is shown in the right column of TABLE 7, and the reply which the database 32 provides back to the module 38 is shown in the right column of TABLE 8, col. 7, lines 7-20*);

retrieving a second portion of data associated with the one or more previous messages (*i.e. user information, col. 10, lines 10-19; telephone directory information, such as a list of names and associated telephone numbers ... user information includes information regarding which users are authorized to access the directory information stored within the databases 31-33, col. 4, lines 13-26; See TABLE 1, col. 11*); and

determining if the first portion and the second portion match (*i.e. user information, col. 10, lines 10-19; telephone directory information, such as a list of names and associated telephone numbers ... user information includes information regarding which users are authorized to access the directory information stored within the databases 31-33, col. 4, lines 13-26; See TABLE 1, col. 11*).

As per claim 30, Nelson teaches comparing the one or more XML tags within the at least one XML based message to the one or more references is performed before the converting the message and before the converted message to be stored in the first database or the second database (*i.e. converting the request from the first format to a second format compatible with a protocol of the repository, col. 1, lines 39-62*).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 5, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (US Patent No. 6,601,065), in view of Jacobs (US Patent No. 6,611,843).

As to claims 5, 18, Nelson does not specifically teach the at least one received XML-based message comprises a Document Type Definition ("DTD").

Jacobs teaches a document type definition (DTD) is augmented for allowing description of the DAG in an XML information set 18 and for providing functionality for a document object model access application 14 interface (DOM API) to process the XML information set 18 (*i.e. A*

document type definition (DTD) is augmented for allowing description of the DAG in an XML information set 18 and for providing functionality for a document object model access application 14 interface (DOM API) to process the XML information set 18, col. 4, lines 49-67).

It would have been obvious to one of ordinary skill of the art having the teaching of Nelson and Jacobs at the time the invention was made to modify the system of Nelson to include the limitations as taught by Jacobs.

One of ordinary skill in the art would be motivated to make this combination in order to extract data values from the content elements by using the description of the first XML ELEMENT to recursively traverse each top-level element and extract the data values from the sub-tree (*col. 2, lines 26-45*) in view of Jacobs, as doing so would give the added benefit of automatically generating SQL that may be used with different client data and with different vendor SQL databases as taught by Jacobs (*col. 2, lines 26-45*).

8. Claims 7, 10-13, 20, 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (US Patent No. 6,601,065), in view of Abjanic et al. (US Patent No. 7,162,542).

As to claims 7, 20, Nelson does not specifically teach forwarding an XML-based message comprising a DTD to the at least one communication device.

Abjanic teaches forwarding an XML-based message comprising a DTD (*i.e. There can be many types of validation templates such as a document type definition (DTD) in XML or a schema, col. 7, lines 51-67*) to the at least one communication device (*i.e. Alternatively, the director 145 may include a built-in switch with a plurality of output ports (physical ports), with a*

server coupled to each physical output port. In such case, a group of servers may have the same IP address or Media Access Control (MAC) address, or could have different addresses. The director 145 then would simply output or switch or forward the packet, including the message containing the XML business transaction information, via one of the physical output ports to a particular server, col. 4, lines 27-41).

It would have been obvious to one of ordinary skill of the art having the teaching of Nelson and Abjanic at the time the invention was made to modify the system of Nelson to include forwarding an XML-based message comprising a DTD as taught by Abjanic.

One of ordinary skill in the art would be motivated to make this combination in order to switch or forward the packet, including the message containing the XML business transaction information, via one of the physical output ports to a particular server (*col. 4, lines 27-41*) in view of Abjanic, as doing so would give the added benefit of processing or manipulating information in a variety of formats, such as XML as taught by Abjanic (*col. 1, lines 52-56*).

As per claim 10, Nelson does not explicitly teach forwarding a responsive XML-based message comprising a DTD to a mediation web server.

Abjanic teaches forwarding a responsive XML-based message comprising a DTD to a mediation web server (*i.e. Transformer 715 can transform messages between a variety of different data formats, as required. An example communication may include a request followed by a response, although the invention is not limited in this respect. For example, a first node may issue a request over network or Internet 130 that is received by a second node. The second node*

may send a response back to the first node. Both the request and response may typically be routed over the Internet or network 130 and transforming switch 710, col. 11, lines 7-21).

It would have been obvious to one of ordinary skill of the art having the teaching of Nelson and Abjanic at the time the invention was made to modify the system of Nelson to include forwarding a responsive XML-based message comprising a DTD to a mediation web server as taught by Abjanic.

One of ordinary skill in the art would be motivated to make this combination in order to send a response back to the first node (*col. 11, lines 7-21*) in view of Abjanic, as doing so would give the added benefit of processing or manipulating information in a variety of formats, such as XML as taught by Abjanic (*col. 1, lines 52-56*).

As to claims 11, 24, Nelson does not expressly teach forwarding a confirmation message to at least one of a customer agent or a customer.

Abjanic teaches forwarding a confirmation message to at least one of a customer agent or a customer (*i.e. Server sends SYN-ACK (an acknowledgement of the Syn packet) back to the client, col. 16, lines 1-48; XML Device determines Destination IP address and Port number of SYN packet matches the device's configuration, and sends SYN-ACK back to Client, col. 16, line 49 to col. 17, line 62*).

It would have been obvious to one of ordinary skill of the art having the teaching of Nelson and Abjanic at the time the invention was made to modify the system of Nelson to include forwarding a confirmation message to at least one of a customer agent or a customer as taught by Abjanic.

One of ordinary skill in the art would be motivated to make this combination in order to process a transaction or message that matches the configuration of the XML device (*col. 16, line 49 to col. 17, line 62*) in view of Abjanic, as doing so would give the added benefit of processing or manipulating information in a variety of formats, such as XML as taught by Abjanic (*col. 1, lines 52-56*).

As to claims 12, 25, Nelson does not specifically teach forwarding at least one of voicemail message, a facsimile message, an email message, or an Internet message to a customer agent.

Abjanic teaches forwarding an Internet message to a customer agent (*i.e. User-Agent, col. 4, line 54 to col. 5, line 10*).

It would have been obvious to one of ordinary skill of the art having the teaching of Nelson and Abjanic at the time the invention was made to modify the system of Nelson to include forwarding at least one of voicemail message, a facsimile message, an email message, or an Internet message to a customer agent as taught by Abjanic.

One of ordinary skill in the art would be motivated to make this combination in order to manage inventory, orders or other business transactions (*col. 3, lines 21-31*) in view of Abjanic, as doing so would give the added benefit of processing or manipulating information in a variety of formats, such as XML as taught by Abjanic (*col. 1, lines 52-56*).

As to claims 13, 26, Nelson does not fairly teach the at least one XML-based message is received from a customer agent.

Abjanic teaches the at least one XML-based message is received from a customer agent (*i.e. User-Agent, col. 4, line 54 to col. 5, line 10*).

It would have been obvious to one of ordinary skill of the art having the teaching of Nelson and Abjanic at the time the invention was made to modify the system of Nelson to include the at least one XML-based message is received from a customer agent as taught by Abjanic.

One of ordinary skill in the art would be motivated to make this combination in order to manage inventory, orders or other business transactions (*col. 3, lines 21-31*) in view of Abjanic, as doing so would give the added benefit of processing or manipulating information in a variety of formats, such as XML as taught by Abjanic (*col. 1, lines 52-56*).

As per claim 22, Nelson does not specifically teach at least one communications control device responsive to the mediation web server, the communication control device operable to forward a responsive XML-based message comprising a Document Type Definition.

Abjanic teaches at least one communications control device responsive to the mediation web server, the communication control device operable to forward a responsive XML-based message comprising a Document Type Definition (*i.e. Transformer 715 can transform messages between a variety of different data formats, as required. An example communication may include a request followed by a response, although the invention is not limited in this respect. For example, a first node may issue a request over network or Internet 130 that is received by a second node. The second node may send a response back to the first node. Both the request and*

response may typically be routed over the Internet or network 130 and transforming switch 710, col. 11, lines 7-21).

It would have been obvious to one of ordinary skill of the art having the teaching of Nelson and Abjanic at the time the invention was made to modify the system of Nelson to include at least one communications control device responsive to the mediation web server, the communication control device operable to forward a responsive XML-based message comprising a Document Type Definition as taught by Abjanic.

One of ordinary skill in the art would be motivated to make this combination in order to send a response back to the first node (*col. 11, lines 7-21*) in view of Abjanic, as doing so would give the added benefit of processing or manipulating information in a variety of formats, such as XML as taught by Abjanic (*col. 1, lines 52-56*).

As per claim 23, Abjanic teaches the system as in claim 22, wherein the communication control device is at least one of a voicemail server, a facsimile server, an email server, and a web server (*Fig. 6*).

Response to Arguments

9. Applicant's arguments regarding the prior arts do not teach the amended claimed limitations, with respect to claims 1-26, 29-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham, can be reached on (571) 272-7079. The fax number to this Art Unit is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le
June 05, 2007